

REMARKS

I. Overview

Claims 1, 3-16, 18-57, 59-74, and 76-89 are pending in the present application. Certain claims have been indicated to be allowable if appropriately rewritten. Entry and reconsideration is respectfully requested.

II. 35 U.S.C. § 112 Objections

Claims 13, 16, 21, 23, 24, and 60 are objected to under § 112, second paragraph.

Claim 13 has been amended to make it clear it is a further limitation to its base claim.

Claim 16 has been amended to make its limitation dependent on claim 13.

Claim 21 has been cancelled thereby mooted the § 112 rejection related to it.

Claim 23 is submitted to be appropriate. Although its base claim gives two alternatives "adjacent or overlapping", claim 23 further limits that phrase.

Claim 24 is submitted to be appropriate in light of amendments to claim 1.

Claim 60 is submitted to be appropriate for the same reasons expressed in support of claim 23.

III. 35 U.S.C. § 103 Rejections

A. Claims 1, 3-16, 18, 19, 21, 31-50, 52-54, 56, and 73 stand rejected as obvious under § 103 based on Gordin, Patent No. 6,340,790, in view of Fox, Patent No. 4,019,301. These rejections are respectfully traversed.

Gordin '790 neither discloses nor teaches the addition of a separate conforming sleeve over the exterior of a tubular metal pole, whether one piece or multiple pieces. Gordin '790 does

not disclose or teach any covering or protection of the exterior of such a metal pole except for galvanization of the metal.

The Office Action (e.g., page 9) takes the position that Fox does not require a filler between its external encasement (e.g., reference numeral 16 in Figures 1 and 2, reference numeral 64 in Figure 4, reference numerals 74 and 76 in Figures 5 and 6, reference numeral 90 in Figure 7 and reference numeral 118 in Figure 9). The Action also takes the position that Fox "discloses a means of preventing corrosion to poles by using a plastic wrap around the structure." (Office Action, p. 9). However, Fox has been carefully reviewed. No embodiment of Fox is shown to cover a hollow metal pole in directly conforming relationship. Rather, each embodiment discloses the outer encasement and a filler or grout between the outer encasement and the device that is being covered. See Specification of Fox -- particularly following:

"A protective system for concrete, wood and steel piling or other structures subject to corrosion or wear from the action of water. The system includes an encasement sleeve surrounding the piling or other structure and made of fiberglass, epoxy resin, or other inert, corrosion resistant material, and a filler of concrete, epoxy resin or the like between the encasement sleeve and the piling. The encasement sleeve is made of separate sections connected together by tongue and groove joints. The encasement and filler are left permanently on the structure to protect the same from water or other elements, and also to reconstruct worn portions to achieve the original structural integrity of the structure."

Fox, p. 1, Abstract (*emphasis added*).

"In accordance with the invention herein, there is provided a protective system for structural members such as piling, said system comprising a sleeve-like encasement member sized to receive at least a portion of said structural member therein. The encasement member is formed with the same cross-sectional configuration is a structural member and is of larger size, so that the outer surface is of the enclosed structural member are spaced from the inner surfaces of the encasement member to define a continuous gap therebetween. The system also includes a filler of inert material in said gap and filling the same, the filler bonding the encasement member to the structural member. The encasement member has a rigid body made of a chemically-inert, corrosion-resistant material,

such as fiberglass, the body having at least two separated facing longitudinal edges, one of which is formed with a longitudinally-extending tongue and the other of which is formed with a longitudinally-extending groove size to receive and retain said tongue."

Fox, col. 2, lines 12-31.

No disclosure or suggestion of using just the encasement is found in Fox. To the contrary, Fox specifically discloses an encasement intentionally made to have a gap between it and the member to which it is being mounted and that the space be filled with the inert filler. Fox specifically states "the encasement and filler are left permanently on the structure to protect the same from water or other elements, and also to reconstruct worn portions to achieve the original structural integrity of the structure." Fox, Abstract.

Therefore, the primary reference Gordin '790 teaches galvanization of the metal tube pole. Fox teaches system that includes a relatively thick filler which hardens and encases the underlying structural member and has an outer encasement that serves as its mold. The system is not operable without the filler or without the encasement.

In contrast, Applicants' claims define a covering of relatively thin sheet material in conforming relation to the exterior of a tubular metal pole. Gordin '790 and Fox teach away from that combination. The combination of Gordin '790 and Fox does not present a *prima facie* case of obviousness. First of all, there is no suggestion of combining the two. Gordin '790 galvanizes its tubular metal poles and nothing more. Fox suggests its encasement and filler system for structural members in water. It does not care about adding to the outside diameter of the piling or other structural member that extends in the water. It does not speak to specific aspects of Applicants' claims including how its system would work with a tapered multi-section pole. It relies on a tongue and groove seam.

Furthermore, even a combination of Gordin '790 and Fox would not teach or suggest the combination of material limitations of Applicants' claims. The Gordin '790/Fox combination would suggest that some sort of mold with a gap be generated to fit around the pole and filled with a filler material that hardens to create a protection system and assist in structural integrity (have some load bearing capacity). Applicants' independent claims distinguish from that teaching. It is counter-intuitive to add a sleeve over a galvanized metal pole which does not need structural repair. The galvanization is taught in the art to be the mode of surface protection of the tubular pole. Moreover, a subtle point is that poles of substantial height contribute to wind load for that structure. It is undesirable to add substantial additional outside diameter to such poles because of the increase in wind load. This would require sturdier and more robust materials (which are more costly) a filler and relatively thick encasement can add substantial weight to such structures. This is counter-indicated.

Therefore, it is respectfully submitted that even a combination of the two references does not present a *prima facie* case of obviousness.

To attempt to emphasize these distinctions, certain of the independent claims have been amended. It is submitted these amendments help clarify these meaningful differences between the cited references and the claims.

B. Claims 20, 22-24, 51, 55, 57, 59-61, 65-78 and 82-89 stand rejected as obvious based on Gordin '790 in view of Fox, and further in view of Oakes, Patent No. 3,968,561. This rejection is respectfully traversed.

Oakes does not add any disclosure or teaching that fills the gap in teaching of Gordin '790 and Fox. Oakes discloses a tubular metal mold that is the form for rigid foam filling. It does

mention a plastic coating is possible on the tubular sheet metal mold (col. 1, lines 21-24). Such a coating is defined as "plastics coated thin steel sheet" and is not a separate sheet material that is wrapped or positioned at the exterior of the tubular sheet metal pole. Therefore, the addition of Oakes does not produce a *prima facie* case of obviousness of the claims under this rejection.

C. Claims 28, 29 and 30 stand rejected as obvious based on Gordin '790 in view of Fox and further in view of Swanson, Patent No. 4,092,079. This rejection is respectfully traversed.

Swanson is like Fox. It discloses and outer mold of rigid material spaced from a wood pole. Grout 44 is pumped in between the mold and the pole. The combination repairs the pole. There are bolts and push plates 48 to center the mold around and space from the pole to receive the grout. Again, this does not fill the gaps in teaching of Gordin '790 and Fox and, therefore, these claims are also allowable over this rejection.

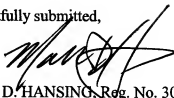
IV. Conclusion

It is respectfully submitted all matters raised in the action have been addressed and remedied and that the application is in form for allowance. Favorable action is respectfully requested.

No fees or extensions of time are believed to be due in connection with this amendment; however, consider this a request for any extension inadvertently omitted, and charge any additional fees to Deposit Account No. 26-0084.

Reconsideration and passage to issuance is respectfully requested.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Mark D. Hansing', written over the typed name.

MARK D. HANSING, Reg. No. 30,643
McKEE, VOORHEES & SEASE, P.L.C.
801 Grand Avenue, Suite 3200
Des Moines, Iowa 50309-2721
Phone No: (515) 288-3667
Fax No: (515) 288-1338
CUSTOMER NO: 22885
Attorneys of Record

- bjh -